A data capture device manufacturer

Automating software delivery lifecycle with IBM Rational software cuts development costs 40 percent

Overview

The need
This data capture device manufacturer needed to better manage and automate the software development lifecycle for its mission-critical product portfolio.

The solution
Starting approximately 15 years ago, the company began adopting a suite of IBM® Rational® software to address its development challenges.

The benefit
The business estimates that, over the years, the solution has helped reduce the development cost for each of its products by approximately 40 percent through automation, collaboration and reuse.

This company produces advanced data capture devices, such as bar code scanners and radio frequency identification (RFID) products, and professional and commercial two-way radios. It also delivers unlicensed wireless broadband capabilities and wireless LANs (WLANs) to retail enterprises.

Improving software development
This business needed to better manage and automate the software development lifecycle for its mission-critical product portfolio. Because the development team used email to manage change requests, it was difficult to keep track of them, and sometimes requests got lost. It could take days for engineers to receive a notification and address the change request. The organization's modeling processes were similarly inefficient. Lacking a collaborative design solution, it was difficult for engineers to collaborate on design changes.

Automating the software delivery lifecycle
Starting approximately 15 years ago, the company began adopting a suite of IBM Rational software to address its development challenges, including IBM Rational ClearCase®, IBM Rational ClearQuest®, IBM Rational Rose® RealTime and IBM Rational Test RealTime software. The business first implemented Rational ClearCase software and then continued to add Rational applications to complement it.

Now, the organization uses Rational ClearCase software to maintain control over its assets, Rational ClearQuest software for change management, Rational Rose RealTime software to support its model-driven development, and Rational Test RealTime software to validate software quality. The Rational applications help the company's engineers better manage the software development lifecycle. For example,

when an application needs updating or changing, engineers receive a change request through Rational ClearQuest software. They use that change record to modify a Unified Modeling Language (UML) model with Rational Rose RealTime software. After completing the modifications, they use Rational Test RealTime software to validate that the changes meet the quality requirements. Finally, engineers save the changes in Rational ClearCase software, where they can distribute them for others to use. For relatively small software changes, engineers can complete this entire process in a matter of hours.

Reducing costs through automation and reuse

Using the Rational solution, the business can manage every step of the software development lifecycle electronically. The solution also helps facilitate collaboration. For example, engineers can review UML models within Rational Rose RealTime software together online. They no longer have to rely on email or in-person meetings for collaboration. In addition, the solution helped promote asset reuse. Assets stored in Rational ClearCase software are easy to find, which assists with reducing overlapping and redundant development efforts.

The business estimates that, over the years, the solution has helped reduce the development cost for each of its products by approximately 40 percent. As the organization continues to push forward with new product development, it expects to continue to capitalize on IBM technologies to help the company move forward.

Solution components

Software

- IBM® Rational® ClearCase®
- IBM Rational ClearQuest®
- IBM Rational Rose® RealTime
- IBM Rational Test RealTime

For more information

To learn more about IBM Rational software, please contact your IBM marketing representative or IBM Business Partner, or visit the following website:
ibm.com/software/rational

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